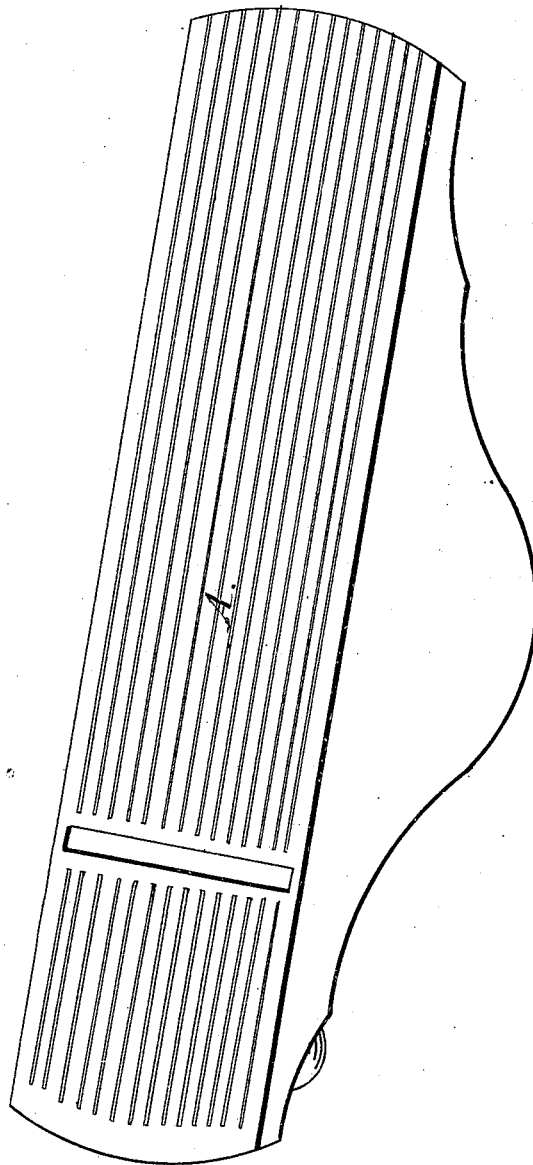


E. G. Storke,
Bench Plane.

No. 96,052.

Patented Oct. 19, 1869.



Witnesses:

H. L. Storke
P. B. Barber

Inventor:

E. G. Storke

United States Patent Office.

E. G. STORKE, OF AUBURN, NEW YORK.

Letters Patent No. 96,052, dated October 19, 1869.

IMPROVEMENT IN PLANE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, E. G. STORKE, of Auburn, in the county of Cayuga, and State of New York, have invented a new and useful Method of Preventing the Adhesion to the Wood, of the Faces of Metallic Planes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, marked "A," making part of this specification, in which is represented the face of a metallic plane, fluted, grooved, or channelled, according to the plan of my invention.

Those flutes, grooves, or channels, may be more or less in number, and cut to a greater or less depth, provided the object be thereby attained of relieving all extra and unnecessary friction.

The object, however, is fully attained by making them about one thirty-second of an inch deep, one-sixteenth of an inch broad, and one-eighth of an inch asunder.

Fully one-half of the bearing-surface of the face of the plane may be thus removed, and thus to that extent diminish the points of contact, and the consequent friction, and, at the same time, preserve the full perfection of the working-face of the plane, including its throat.

It has long been known to mechanics that metallic planes have adhered to the wood much closer than wooden planes, and therefore required much more power to operate them.

This excessive friction was caused by their exact

and even faces, which were not materially varied by use or atmospheric changes.

When used on very level surfaces, there were so many points of contact that the friction was troublesome, and the adhesion was further increased by atmospheric pressure, as partial vacuums would thus be formed.

The practical effect of this has been to prevent, in a large degree, the introduction and general use of metallic planes.

The object of my invention is twofold, namely, to remove about one-half of the surface of the face of the plane, so that there shall be fewer points of contact, and to form free air-channels, so that no vacuums can be formed, or any trouble arise from atmospheric pressure, however perfect the plane or true the surface on which it is moved.

I effect these two objects by fluting, grooving, or channelling the faces of metallic bench or other planes for wood-workers, as above specified, parallel to their length, or in some equivalent way.

What I claim as my invention, and desire to secure by Letters Patent, is—

A metallic plane, having the face grooved in lines parallel to the sides, in the manner and for the purpose specified.

E. G. STORKE.

Witnesses:

U. L. STORKE,
T. B. BARBER.